Patent Claims:

1. Method for the valve calibration of an analog controlling, electrically actuatable hydraulic valve (2, 2´,3, 3´, 3´´, 3´´´) in a device, in particular an electrohydraulic pressure control device (4), including at least one externally supplied pressurization unit (1, 1´) and pressure sensors (9, 10, 10´, 10´´, 10´´´), with said device comprising several pressure control circuits (A, B, C, D) as well as especially several brake circuits (I., II.), and with at least some pressure control circuits being connected to a pressure sensor associated with this circuit and to inlet and outlet valves, c h a r a c t e r i z e d in that
- several calibration routines are performed to generate and store automatically established calibration data, and
- during or prior to each calibration routine, the externally supplied pressurization unit (1, 1´) produces pressure in at least one pressure control circuit (A, B, C, D), and calibration data for one or several analog controlling hydraulic valves is recorded by using the pressure that has built up.

2. Method as claimed in claim 1,
c h a r a c t e r i z e d in that a first pressure control circuit (A) is used as a pressure accumulator and the calibration data of a valve is recorded in at least one additional pressure control circuit (B) which is other than the first circuit.

3. Method as claimed in claim 2,
c h a r a c t e r i z e d in that pressure is built up also in least one additional circuit with the valve (3´) being calibrated by means of the externally supplied pressurization unit, and this pressure is lower than the pressure in the first circuit.

4. Method as claimed in at least any one of the preceding claims,
c h a r a c t e r i z e d in that the calibration data comprises the differential pressure or variables that can be derived therefrom, and the differential pressure at which the opening current of the valve shall be measured is initially adjusted by opening the same valve, with hydraulic volume of the first circuit being discharged into the additional circuit, whereupon the opened valve will be closed again in full extent.

5. Method as claimed in at least any one of the preceding claims,
c h a r a c t e r i z e d in that the valve is slowly opened at a differential pressure previously adjusted and measured according to claim 4 by variation of the valve current, and the opening current is measured when the pressure in the first or the additional circuit or the differential pressure has changed by a fixed predefined degree.

6. Method as claimed in at least any one of the preceding claims,
c h a r a c t e r i z e d in that for establishing the calibration data, several test values and/or several measuring routines are taken into account for the purpose of improving accuracy or for redundancy.

7. Pressure control device for electronic brake systems of driving dynamics control systems,
c h a r a c t e r i z e d in that the device comprises a microcomputer which implements the method as claimed in at least any one of claims 1 to 6.